

# Serving the Valley for a Better Life

Gary Harris
Vice President, Industrial Marketing & Services
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### Welcome to Nashville!

- Nashville is home to the County Music Hall of Fame and is the "Songwriting Capital of the World"
- One of the best places to travel in 2018 -Travel Velocity
- No. 4 Metro American Business Journal 2017
- No. 7 Fastest-Growing American City -Forbes, January 2018
- No. 1 Minor League Baseball City
- No. 8 City for Tech Jobs Time, Money Magazine
- One of 33 trips everyone should take in the U.S, in 2018 Business Insider
- Health-care capital of the U. S.







### **TVA Mission to Serve**

#### Energy



Provide affordable power throughout the Valley region

#### **Environment**



Act as a steward of the Valley's natural resources

#### **Economic Development**



Serve as a catalyst for sustainable economic development

### What We Are

- Provider of affordable, reliable power
- Steward of the Valley's natural resources
- Partner for economic growth



"Power is really a secondary matter.... TVA is primarily intended to change and to improve the standards of living of the people of that valley. Power is, as I said, a secondary consideration. Of course, it is an important one because, if you can get cheap power to those people, you hasten the process of raising the standard of living."

President Franklin D. Roosevelt



### What We Do

- Serve 7 states, 56 directly served customers, 154 local power companies and 80,000 square miles
- Federal customers include 6 large directly served facilities and numerous local power company served facilities
- Manage the Valley's river systems and environmental resources



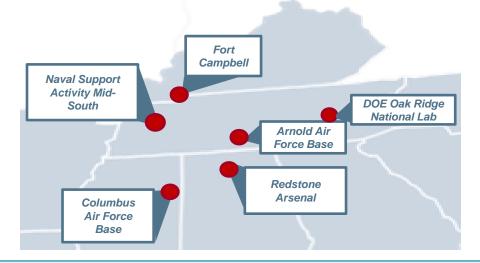
"Father of TVA," Senator George Norris

# Why We're Unique

Owned by the People	No stockholders
Presidentially appointed Board of Directors	Provides service & generates value for stakeholders
Directly served Federal & Industrial customers	No taxpayer dollars
Local Power Company partnerships	Partner for <b>economic growth</b>



### Our Federal Customers Are Important To Us



These six federal customers deliver a combined \$25.5 Billion economic impact and 202,462 jobs



### TVA UESC Projects

- Offering UESCs since 1999, over 30 projects
- Cumulative cost savings to DOD over \$97 million
- Past projects: Redstone Arsenal, Ft. Campbell, NSA Mid-south, IRS,
   NAS Meridian
- Current projects (development and implementation)
  - Redstone Arsenal
  - Ft. Campbell
  - Naval Support Activity Mid-south
  - Abernethy Federal Building Courthouse, Aberdeen, MS
  - DOE Paducah Site
  - NASA Marshall Space Flight Center



# Energy





# **Keeping Rates Low**

Industrial rates: top quartile

Residential rates: top quartile

Reduced operating expense by \$800 million

Reduced fuel costs by \$1.0 billion

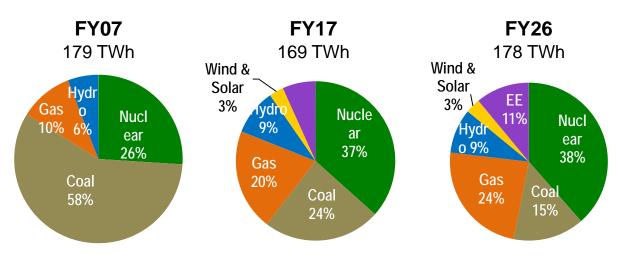
Completed large capital projects with no

increase in debt



# A Diverse Power Supply

Energy from non-emitting resources increases from 32% in FY07 to 61% by FY26



### **Transmission Asset Investments**

- Reliability remains a top priority
- FY13-FY21 \$3 billion investment





### **Financial Performance**









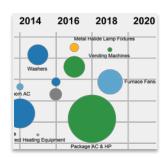
# A Good Plan, Working

#### Plan



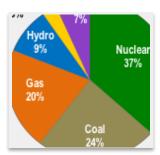
- Balance rate & debt
- Competitive rates
- Improved balance sheet

#### **Challenges**



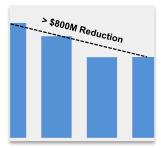
- Declining loads
- Distributed energy
- Current pricing does not reflect true value

#### Value



- Rationalize & diversify the fleet
- Low environmental risk

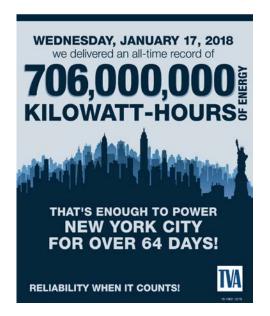
#### **Track Record**

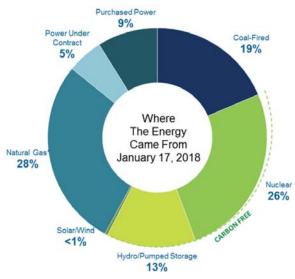


- Reducing costs
- Top quartile by 2019 except 1 function
- \$19B invested while holding debt flat

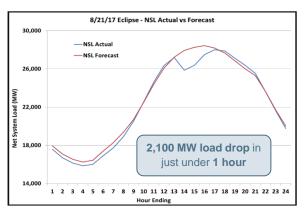


### All-time Record Energy Delivered



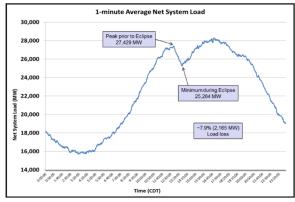


## Solar Eclipse Summary





- Requested hydro flexibility (~150 MW)
- All 4 RMP generators and CC plants were in service for maximum flexibility
- 1,000 MWs of regulation



#### Response

- Removed 2 RMP generators (750 MW)
- Requested a decrease in hydro generation (165 MW)
- Removed CC duct burners at 3 plants and placed the units into AGC control to regulate down
- As load recovered, put RMP and duct burners back in service and requested HDCC to increase generation

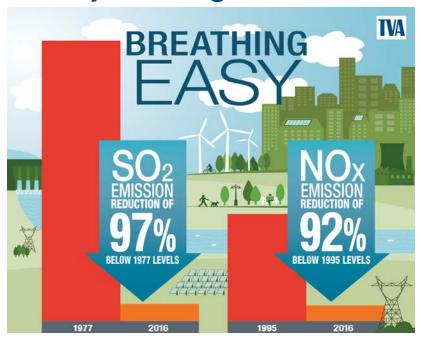
## **Environment**





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# Air Quality Management



# Coal Assets – Decommissioning



Widows Creek 2017

Johnsonville 2018

Colbert 2019

Allen 2020



### Watts Bar Unit 2



Achieved Commercial Operations Oct. 19, 2016

# Gas Asset - Allen Combined Cycle



Project ~95% complete - Commercial Operations in 2018



### Recreation

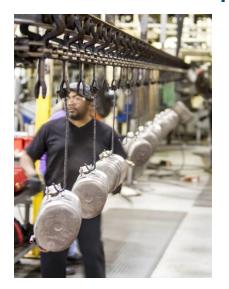
Recreation on TVA lakes is worth about \$12 billion in business

each year, and it generates

130,000 jobs a year

- Processed over 400 requests for permits for shoreline construction
- Reviewed > 6,000 acres of public land to improve our properties
- Environmental education programs for >3,600 children
- Partnered with communities on >200 events and volunteer activities

# **Economic Development**





# **Economic Development Accomplishments**

2017

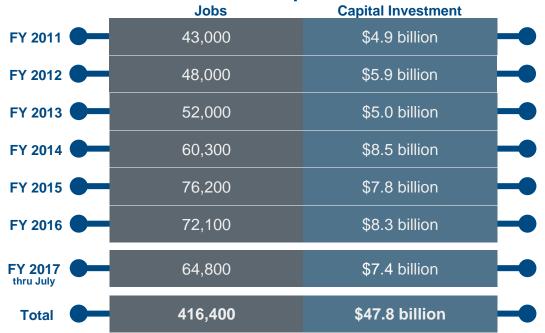
218 companies recruited\$8.3 billion invested70,000 jobs12th year as Top 10 utility

Since 2011, 400,000 jobs \$48 billion invested

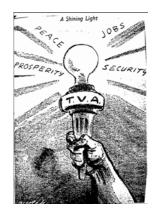




### TVA Economic Development Performance







# Nine

Decades of Service

# Still a Shining Light

